

WHAT IS CLAIMED IS:

1. A speaker system, comprising:
  - a primary enclosure having at least one wall and a volume;
  - a speaker driver mounted to a wall of the primary enclosure such that a front face of the speaker driver is external to the primary enclosure and a rear face of the speaker driver is internal to the primary enclosure;
  - a port section external to the primary enclosure, the port section including a port opening; and
  - a transition region coupling the primary enclosure to the port section such that air in the primary enclosure is coupled external to the primary enclosure via the port opening.
2. The speaker system of Claim 1, wherein the transition region comprises a transition section external to the primary enclosure, the transition section defining a continuous transition from the primary enclosure to the port opening.
3. The speaker system of Claim 1, wherein the transition region comprises:
  - a first end having a first end opening coupled to air within the primary enclosure volume, the first end opening having dimensions substantially equal to an internal dimension of the primary enclosure; and
  - a second end coupled to the first end and also coupled to the port section, the second end having a second end opening, the second end opening having dimensions substantially equal to an internal dimension of the port opening.
4. The speaker system of Claim 1, wherein the primary enclosure comprises a cylindrical enclosure.
5. The speaker system of Claim 1, wherein the primary enclosure comprises a rectangular enclosure.
6. The speaker system of Claim 1, wherein an axis of the port opening is substantially parallel to an axis of the speaker driver.
7. The speaker system of Claim 1, wherein an axis of the port opening is substantially perpendicular to an axis of the speaker driver.

8. The speaker system of Claim 1, wherein the speaker driver comprises a full range speaker driver having a free air resonance less than 420 Hz and a diaphragm dimension less than 35 cm.

9. A speaker system, comprising:

a substantially cylindrical primary enclosure having a primary enclosure volume and having an open end and a closed end;

a full range speaker driver mounted to a surface of the primary enclosure, a front face of the speaker driver positioned external to the primary enclosure and a rear face of the speaker driver positioned internal to the primary enclosure;

a substantially cylindrical port section having open ends, the axis of the port section coincident with an axis of the primary enclosure; and

a transition section having a first open end coupled to the open end of the primary enclosure and a second open end substantially opposite the first open end, the second open end coupled to one end of the port section.

10. The speaker system of Claim 9, wherein the speaker driver is mounted to the closed end of the primary enclosure.

11. The speaker system of Claim 9, wherein the speaker driver is mounted to a face of the primary enclosure.

12. The speaker system of Claim 9, wherein an axis of the speaker driver is substantially perpendicular to the axis of the port section.

13. The speaker system of Claim 9, wherein dimensions of the first open end of the transition section substantially match dimensions of the open end of the primary enclosure.

14. The speaker system of Claim 9, wherein dimensions of the second open end of the transition section substantially match dimensions of the port section.

15. The speaker system of Claim 9, wherein the primary enclosure comprises a body portion of a bottle.

16. The speaker system of Claim 9, wherein the port section comprises a neck of a bottle.

17. A speaker system, comprising:

a primary enclosure having a primary enclosure volume;  
    means for porting the primary enclosure, the means located external to the primary enclosure;  
    means for transitioning acoustic energy from within the primary enclosure to the means for porting the primary enclosure; and  
    means for providing audio mounted to the primary enclosure.

18. A method of extending selected frequency response of a speaker driver, the method comprising:

    forming a primary enclosure volume;  
    porting the primary enclosure volume using a port section having dimensions smaller than a cross section of the primary enclosure volume;  
    transitioning the primary enclosure volume to the port section in a continuous reducing section; and  
    generating a full range audio signal from a source having a front face external to the primary enclosure volume and a rear face internal to the primary enclosure volume.

19. A speaker system, comprising:

    means for forming a primary enclosure volume;  
    means for porting the primary enclosure volume using a port section having dimensions smaller than a cross section of the primary enclosure volume;  
    means for transitioning the primary enclosure volume to the port section in a continuous reducing section; and  
    means for generating a substantially full range audio signal from a source having a front face external to the primary enclosure volume and a rear face internal to the primary enclosure volume.

20. A speaker system, comprising:

    a substantially cylindrical primary enclosure having diameter of less than 30 cm and a primary enclosure volume and having an open end and a closed end;  
    a full range speaker driver mounted to a surface of the primary enclosure with an axis of the speaker driver mounted less than 7 cm above the closed end, a front

face of the speaker driver positioned external to the primary enclosure and a rear face of the speaker driver positioned internal to the primary enclosure;

a substantially cylindrical port section having open ends of less than 2.5 cm diameter, the axis of the port section coincident with an axis of the primary enclosure; and

a transition section having a first open end coupled to the open end of the primary enclosure and a second open end substantially opposite the first open end, the second open end coupled to one end of the port section.

21. The speaker system of Claim 20, wherein a diameter of the speaker driver is less than 3 cm.